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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/603,364	06/23/2003	Divya Chopra	DC8516 US NA	2771
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23906	7590	03/22/2006
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WILMINGTON, DE 19805

EXAMINER

LEWIS, BEN

ART UNIT

PAPER NUMBER

1745

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

CM

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/603,364	CHOPRA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ben Lewis	1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-18 are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

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## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-3, 4-6 and 8-9, 7, 10-12, drawn to a method of making a current collector plate, classified in class 429, subclass 34.
  - II. Claims 13-15, 16-18, drawn to a a current collector plate, classified in class 429, subclass 39

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process of making and product made. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different product or (2) the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In this case, as admitted in the subject matter of the present claims the current collector plate can be fabricated by four distinct processing procedures as recited in claims 1-3, 4-6 and 8-9, 7, 10-12, respectively.
3. If invention I is elected, an election of species is required. This application contains claims directed to the following patentably distinct species of the claimed invention.

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I-1, Claims 1-3 read on a process for producing of making a current collector plate for use in a proton exchange membrane fuel cell comprising:

- (a) molding by injection or compression molding a composition comprising from about 10 to about 50% by weight of a plastic, from about 10 to about 70% by weight of a graphite fibre filler, and from 0 to about 80% by weight of a graphite powder filler to form the current collector plate having two surface layers;
- (b) measuring the thickness of the current collector plate;
- (c) removing the surface layers to reduce the thickness of the current collector plate by no more than about 10 micrometers.

I-2, Claim 4-6, read on a process for producing of making a current collector plate for use in a proton exchange membrane fuel cell comprising:

- (a) molding by injection or compression molding a composition comprising from about 10 to about 50% by weight of a plastic, from about 10 to about 70% by weight of a graphite fibre filler, and from 0 to about 80% by weight of a graphite powder filler to form the current collector plate having two surface layers, wherein one or both of the surfaces comprise flow field channels and lands defined by the channels;
- (b) measuring the thickness of the current collector plate at the lands;
- (c) removing the surface layers at the lands to reduce the thickness of the current collector plate at the lands by no more than about 10 micrometers.

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I-3, Claim 7, read on a process for producing of making a current collector plate for use in a proton exchange membrane fuel cell comprising:

- (a) molding by injection or compression molding a composition comprising from about 10 to about 50% by weight of a plastic, from about 10 to about 70% by weight of a graphite fibre filler, and from 0 to about 80% by weight of a graphite powder filler to form the current collector plate having two surface layers;
- (b) measuring the current collector plate's average thickness;
- (c) measuring the current collector plate's through-plane resistivity;
- (d) removing a portion of the surface layers by abrasion; and
- (e) repeating steps (a) to (d) until a desired plate thickness is removed, wherein the desired plate thickness is no more than about 10 micrometers.

I-4, Claims 10-12, read on a process for producing of making a current collector plate for use in a proton exchange membrane fuel cell comprising:

- (a) molding by injection or compression molding a composition comprising from about 10 to about 50% by weight of a plastic, from about 10 to about 70% by weight of a graphite fibre filler, and from 0 to about 80% by weight of a graphite powder filler to form the current collector plate having two surface layers, wherein one or both of the surfaces comprise flow field channels and lands defined by the channels;
- (b) measuring the current collector plate's average thickness at the lands;
- (c) measuring the current collector plate's through-plane resistivity;

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(d) removing a portion of the surface layers at the lands by abrasion; and  
(e) repeating steps (a) to (d) until a desired plate thickness at the lands is removed, wherein the desired plate thickness is no more than about 10 micrometers.

5. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, none of the claims are generic.

6. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

8. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims

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are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

9. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ben Lewis whose telephone number is 571-272-6481. The examiner can normally be reached on 8:30am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ben Lewis

  
PATRICK JOSEPH RYAN  
SUPERVISORY PATENT EXAMINER

Patent Examiner  
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